

Abstract

The invention is an imager assembly for a miniature camera head. The assembly comprises an imaging sensor having conductive leads; an objective lens system placed on top of the sensor; circuitry, mounted beneath the imaging sensor, for driving the sensor and amplifying the electrical signals; and conductive wires electrically linking the internal components of the assembly and for linking the assembly to remote locations. The conductive leads are bent and the circuitry and conductive wires are arranged and mounted such that the dimensions in a plane parallel to the sensor plane of the camera head are approximately equal to or less than the dimensions in the plane of the sensor. The circuitry is capable of delivering signals produced by the imaging sensor for further processing and the components of the imager, except for the imaging surface of the sensor and the objective lens system, are encapsulated by an isolating material.